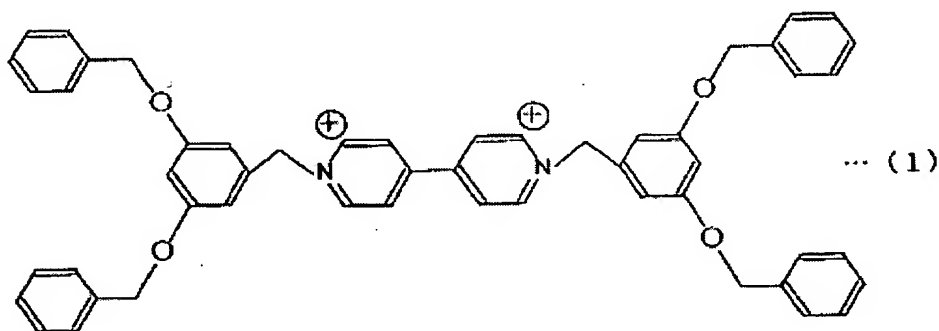


WHAT IS CLAIMED IS:

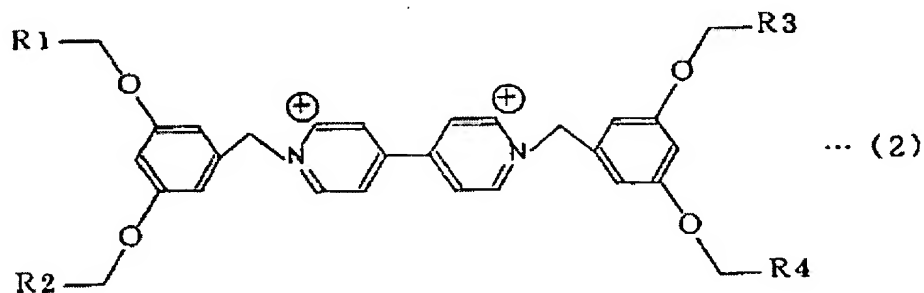
1. A photochromic compound which sensitizes a wavelength region of not less than 700 nm or a specific infrared region to thereby exhibit
5 absorbency at a visible region.

2. The photochromic compound according to Claim 1, which comprises a 4,4'-bipyridine derivative represented by the following formula
(1):



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3. The photochromic compound according to Claim 1, which comprises a 4,4'-bipyridine derivative represented by the following formula
(2):



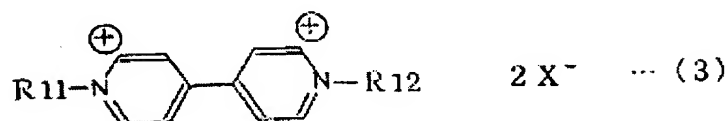
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wherein R₁, R₂, R₃, and R₄ may be the same or different from each other and

each is a condensed aromatic hydrocarbon or a derivative thereof.

4. The photochromic compound according to Claim 1, which comprises a 4,4'-bipyridine derivative represented by the following formula

5 (3):



wherein R_{11} and R_{12} , may be the same or different from each other and each is an alkyl group having 1 to 10 carbon atoms or a derivative thereof; and X^- is selected from among Cl^- , BF_4^- , PF_6^- , AsF_6^- , ClO_4^- , and NO_3^- .

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5. A photochromic composition comprising a solution having the photochromic compound according to any one of Claims 1 to 4 dissolved in one solvent or a mixed solvent selected from among dimethylformamide (DMF), dimethylacetamide, propylene carbonate, acetonitrile, gamma-
15 butyllactone, and butanol.

6. A photochromic film comprising a film having the photochromic compound according to any one of Claims 1 to 4 dispersed therein.

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7. A photochromic composition at least comprising the photochromic compound according to any one of Claims 1 to 4 and a ultraviolet absorber, which absorbs a ultraviolet light.

8. A functional element, comprising

a photochromic which sensitizes a wavelength of not less than 700 nm or a specific wavelength within an infrared region, and which exhibits absorbance within a visible region, and

5 a light source which has an energy strength at a wavelength region of not less than 700 nm or a specific wavelength within an infrared region enough for being sensitized by the photochromic compound,

wherein a photochromic phenomenon, which sensitizes a wavelength of not less than 700 nm or a specific wavelength within an infrared region,
10 and which exhibits absorbance within a visible region, is utilized.

9. The functional element according to Claim 8, which possesses a ultraviolet shielding member, which shield an incident ultraviolet light entering in the functional element.

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10. The functional element according to Claim 8, wherein said photochromic layer containing the photochromic compound at least comprises a ultraviolet absorber, which absorber a ultraviolet light.

20 11. The functional element according to any one of Claims 8 to 10, which is a photochromic display element.

12. The functional element according to any one of Claims 8 to 10, which is an anti-glare mirror.